

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims:

1-55. (Canceled)

56. (New) A gateway apparatus coupled to a client computer and a file server via a network comprising:

a first interface, coupled to the client computer via the network, which receives a first type file access request from the client computer based on a first type protocol;

a second interface, coupled to the file server via the network, which outputs a second type file access request to the file server based on a second type protocol,

a processing unit coupled to the first and second interface; and

a memory coupled to the processing unit,

wherein the first type file access request includes a path name indicating a directory including a file to be accessed and a file name indicating the file, and the file name is a first type of unique identifier in the directory,

wherein the second type file access request includes a file ID which is a second type of unique identifier in the file server and indicates the file,

wherein the memory stores information of correspondence between path name information and file name information of the first type protocol, and file ID information of the second type protocol,

wherein, when the first interface receives a first command of the first type file access request from the client computer, the first command including a first set of a first path name and a first file name related to a first file and instructing to write the first file, the processing unit checks whether the first file is already created or not in the file server,

wherein after checking, if the first file is not created in the file server, the processing unit sends a second command of the second type file access request to the file server via the second interface, the second command for making the file server create the first file which is assigned to a first file ID of the second type protocol in the file server,

wherein after checking, if the first file has been created in the file server, the processing unit sends a third command of the second type file access request to the file server via the second interface, the third command for making the file server create a second file which includes updated data of the first file and is assigned to a second file ID of the second type protocol in the file server, and

wherein the first file ID is different from the second file ID.

57. (New) The gateway apparatus according to claim 56,

wherein, after the second file is created in the file server, if the first interface receives a fourth command of the first type file access request from the client computer, the fourth command including the first set of the first path name and the

first file name related to the first file and instructing to read the first file, the processing unit sends a fifth command of the second type file access request to the file server via the second interface, the fifth command including the second file ID assigned to the second file and making the file server send the second file including the update data of the first file to the gateway apparatus.

58. (New) The gateway apparatus according to claim 57,
wherein the first interface and the second interface are the same.

59. (New) The gateway apparatus according to claim 57,
wherein the first interface is configured to receive the first type file access request according to NFS, CIFS or both.

60. (New) The gateway apparatus according to claim 59,
wherein the processing unit modifies the information in the memory to include relationship information among the first set of the first path name and the first file name, the first file ID and the second file ID in the memory.

61. (New) A gateway apparatus according to claim 60,
wherein the first command of the first type file access request comprises a plurality of commands as a command sequence; and

wherein the processing unit identifies an end of the command sequence of the first command by checking a predetermined time measured from a time at which the first interface receives a latest command of the command sequence of the first command.

62. (New) A gateway apparatus coupled to a client computer and a file server via a network comprising:

an interface, coupled to the client computer and the file server via the network, which receives a first type file access request from the client computer in accordance with a first type protocol and outputs a second type file access request to the file server in accordance with a second type protocol;

a processing unit coupled to the interface; and

a memory coupled to the processing unit,

wherein the first type file access request includes a path name indicating a directory including a file to be accessed and a file name indicating the file, and the file name is a first type of unique identifier in the directory,

wherein the second type file access request includes a file ID which is a second type of unique identifier in the file server and indicates the file,

wherein the memory stores information of correspondence between path name information and file name information of the first type protocol, and file ID information of the second type protocol,

wherein if the interface receives a first request of the first type file access request from the client computer, the first request including a first set of a first path name and a first file name related to a first file and instructing to create the first file from the client computer, the processing unit sends a second request of the second type file access request to the file server via the interface, the second request making the file server create the first file which is assigned to a first file ID of the second type protocol in the file server,

wherein, after processing the first request of the first type file access request, if the interface receives a third request of the first type file access request from the client computer, the third request including the first set of the first path name and the first file name related to the first file and instructing to update the first file, the processing unit sends a fourth request of the second type file access request to the file server via the interface, the fourth request making the file server create a second file which includes updated data of the first file and is assigned to a second file ID in the file server, and

wherein the first file ID is different from the second file ID.

63. (New) The gateway apparatus according to claim 62,

wherein, after the second file is created in the file server, if the interface receives a fifth request of the first type file access request from the client computer, the fifth request including the first set of the first path name and the first file name

related to the first file and instructing to read the first file, the processing unit sends a sixth request of the second type file access request to the file server via the interface, the sixth request including the second file ID assigned to the second file and making the file server send the second file including the update data of the first file to the gateway apparatus.

64. (New) The gateway apparatus according to claim 63,

wherein the interface includes a first interface receiving the first type file access request from the client computer in accordance with the first type protocol and a second interface issuing the second type file access request to the file server based on the second type protocol.

65. (New) The gateway apparatus according to claim 63,

wherein the interface is configured to receive the first type file access request according to NFS, CIFS or both.

66. (New) The gateway apparatus according to claim 65,

wherein the processing unit modifies the information to include relationship information among the first set of the first path name and the first file name, the first file ID and the second file ID into the memory.

67. (New) A gateway apparatus according to claim 66,
- wherein the first command of the first type file access request comprises a plurality of commands as a command sequence; and
- wherein the processing unit identifies an end of the command sequence of the first command by checking a predetermined time measured from a time at which the interface receives a latest command of the command sequence of the first command.